

Emission Factors & Calculation Method

While entering information for your annual emissions report, the Emissions tab within Process Emissions will ask for a few items. This primer will help you determine what option(s) you should choose.

The screenshot shows a form with the following fields:

- Pollutant Code:** A text input field.
- Calculation Method:** A dropdown menu.
- Emission Factor (Lbs/Unit):** A text input field with a small icon to its right.
- Emission Factor Unit:** A dropdown menu.
- Estimated Emissions (Tons):** A text input field.
- Comment:** A large text area for additional information.

On the right side of the form, there are two small icons: a square and a trash can.

Pollutant Code – There are hundreds of pollutants, many of them HAPs, that you have an option of choosing to report. Pollutants that contribute to chargeable emissions include NO_x, SO₂, VOC, PM₁₀-FIL, PM-CON, and any of the individual HAPs.

Calculation Method – This is a code that defines the method used to determine emissions. The table below includes all options for calculation method and highlights the methods most commonly used. Upon selecting a calculation method, a pop-up box will appear with the options for selecting an emission factor.

Emission Factor – Dependent upon the calculation method used, this box will either pre-populate with a value or become available to provide a value as shown in the Calculation Method table.

Emission Factor Unit – The unit of measure denominator of the emissions factor (pounds/unit). The Emission Factor Unit must match the Process Throughput Unit of Measure in order to calculate emissions.

Estimated Emissions (Tons) – Total calculated amount of actual emissions. This value is calculated if an emission factor is provided but may also be a field that is available to enter your calculated emission totals if you are using a Calculation Method such as “Material Balance” or “CEMS (no EF).”

Comment – If there is any additional information warranted you may include it as a comment within that pollutant emissions calculation.

Please refer to additional training documents, such as our SLEIS Webinar, for other instructions on completing your SLEIS annual emissions inventory report.

KDHE Emissions Inventory - <http://www.kdheks.gov/emission/index.html>

Kansas SLEIS - <https://kdhe.windsorcloud.com/sleis/>

Emissions Calculation Method Code	Description	Emission Factor	Other Notes
1	CEMS (No Emission Factor)	N/A	Enter Estimated Emissions (tons)
41	CEMS (Post-Control Emission Factor)	User Entered	Must have a Control Device attached to Unit Process
42	Engineering Judgement (Post-Control Emission Factor)	User Entered	Must have a Control Device attached to Unit Process
22	Engineering Judgement (Pre-Control Emission Factor)	User Entered	
2	Engineering Judgement (No Emission Factor)	N/A	Enter Estimated Emissions (tons)
7	Manufacturer Specifications (No Emission Factor)	N/A	Enter Estimated Emissions (tons)
47	Manufacturer Specifications (Post-Control Emission Factor)	User Entered	Must have a Control Device attached to Unit Process
27	Manufacturer Specifications (Pre-Control Emission Factor)	User Entered	
3	Material Balance (No Emission Factor)	N/A	Enter Estimated Emissions (tons)
43	Material Balance (Post-Control Emission Factor)	User Entered	Must have a Control Device attached to Unit Process
23	Material Balance (Pre-Control Emission Factor)	User Entered	
13	Other Emission Factor (Post-Control)	User Entered	Must have a Control Device attached to Unit Process
33	Other Emission Factor (Pre-Control)	User Entered	
9	S/L/T Emission Factor (Post-Control)	Provided	Must have a Control Device attached to Unit Process
29	S/L/T Emission Factor (Pre-Control)	Provided	
6	S/L/T Speciation Profile (No Emission Factor)	N/A	Enter Estimated Emissions (tons)
46	S/L/T Speciation Profile (Post-Control Emission Factor)	Provided	Must have a Control Device attached to Unit Process
26	S/L/T Speciation Profile (Pre-Control Emission Factor)	Provided	
10	Site Specific Emission Factor (Post-Control)	User Entered	Must have a Control Device attached to Unit Process
30	Site Specific Emission Factor (Pre-Control)	User Entered	
4	Stack Test (Post-Control Emission Factor)	User Entered	Must have a Control Device attached to Unit Process
24	Stack Test (Pre-Control Emission Factor)	User Entered	
12	Trade Group Emission Factor (Post-Control)	User Entered	Must have a Control Device attached to Unit Process
32	Trade Group Emission Factor (Pre-Control)	User Entered	
8	US EPA Emission Factor (Post-Control)	Provided	Must have a Control Device attached to Unit Process
28	US EPA Emission Factor (Pre-Control)	Provided	
5	US EPA Speciation Profile (No Emission Factor)	N/A	Enter Estimated Emissions (tons)
45	US EPA Speciation Profile (Post-Control Emission Factor)	User Entered	Must have a Control Device attached to Unit Process
25	US EPA Speciation Profile (Pre-Control Emission Factor)	User Entered	
11	Vendor Emission Factor (Post-Control)	User Entered	Must have a Control Device attached to Unit Process
31	Vendor Emission Factor (Pre-Control)	User Entered	

